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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,684	01/22/2002	Francis James Canova JR.	035451-0132 (3645.Palm)	5151

26371 7590 07/26/2005

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EXAMINER	
SHENG, TOM V	

ART UNIT	PAPER NUMBER
2677	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/054,684	CANOVA, FRANCIS JAMES	
	Examiner	Art Unit	
	Tom V. Sheng	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henry, Jr. (US 5,881,169) in view of Cooper (US 5,006,836).

As for system claim 1 and associated interface claim 8, Henry teaches a handheld computer system (figures 1, 3, 5; portable computing device), comprising:

a switch (a switch on the computing device);

a user interface (display screen 120/400 with different text input/selection fields);

a housing (shown outside the display screen 120); and

a display supported by the housing (display screen 120/400),

wherein the user interface includes a text information entry area (individual character selection field 220),

wherein the text information entry area is activated in response to manipulation of the switch (displaying the character selection field 220 when invoked). Further, the switch is outside the display screen versus an equivalent activation area 411 on the display screen. See column 2, line 65 through column 3, line 12; column 3, lines 31-44; and column 4, lines 34-61.

However, Henry does not teach that the switch is a pressure sensitive switch, the housing having a deformable side, the housing being sized to be held in one hand, the pressure sensitive switch coupled to the deformable side of the housing such that when the housing is squeezed by the one hand, the deformable side is deformed and the switch is toggled.

Cooper teaches a control mouse 10 having pressure operated switches 21 and 22 and are positioned on digit-engaging portions 30 and 31 of the vertical wall 29. The wall 29 is resiliently flexible so that when it is squeezed between portions 30 and 31, it moves inward and presses against operating mechanism 26, 27 of switches 21, 22 (Fig. 3; column 1, line 60 through column 2, line 11). Particularly, when the mouse is squeezed, a closed state signal is sent to the computer, and when the squeezing is relaxed, an open state signal is sent to the computer (column 2, lines 21-52). Further, Cooper teaches that the signals generated by the squeezing and unsqueezing of the mouse can be used for any purpose by the computer (column 2, lines 59-61).

One of ordinary skill in the art, at the time of the invention, would recognize that Cooper's pressure operated switch 21 or 22 reads on claimed pressure operated switch, the flexible portion 30 or 31 reads on claimed deformable side, and the coupling and operation above regarding the switches 21, 22 and the portions 30, 31 read on claimed the pressure sensitive switch coupled to the deformable side of the housing such that when the housing is squeezed by the one hand, the deformable side is deformed. The squeezing and unsqueezing correspond to open and closed state, which is not the same as toggling the switch each time the deformable side is deformed;

however, this is a well known variation and the switch 21 or 22 could easily modified to work as a toggle switch. For support, Danielson teaches a toggle switch (fig. 29 or 30; column 25, lines 49-57). Moreover, one would realize that, by incorporating Cooper's flexible wall portion and corresponding pressure operated switch in Henry's invention, an intuitive and ergonomic switching function is provided for text information entry. Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Cooper's switching setup into Henry's handheld computer, due to the intuitive and ergonomic benefits above.

As for claim 2, the deactivation is taught by the unsqueezing of Cooper's handheld computer.

As for claim 3, Cooper's squeezing reads on claimed first manipulation and unsqueezing reads on claimed second manipulation.

As for claims 4-5, Cooper's switch 21 or 22 is a squeeze switch.

As for claim 6, Henry teaches also character input area 160 and anticipated character selection field 240 that could be used in any combination with the individual character selection field 220 so as to be activated (popped-up) together.

As for claim 7, Henry teaches that the selection field 240 can be varied in size by dragging the periphery of the field. Obviously, it would be an alternative to activate and deactivate this field 240 instead of field 220 together with this size-changing feature.

As for claim 9, Henry's individual character selection field 220 reads on claimed pictorial representation of a keyboard or an area assigned for entering text information.

As for claims 10-11, Henry's character input area 160 could similarly used in place of the individual character selection field 220 as the field for activation and deactivation.

As for claim 12, naturally when deactivated, the individual character selection field 220 would be removed versus being displayed when activated; otherwise the purpose of activation in the first place is defeated.

Claim 13 is rejected per analyses of claims 8-12 and 5.

As for claims 14-15, as shown, modified Henry's switch is inherently integrated into a portion of a housing of the handheld computer.

As for claims 16-17, it is a basic convenience to provide a specific symbol at the switch to designate the function of the switch.

Method claims 18-22 only differ from claims 1-7 in that the claimed pressure sensitive switch is a non-toggling type. Henry as modified by Cooper reads on the non-toggling pressure sensitive switch as claimed. Moreover, Henry's activation area 411 reads on claimed touch sensor.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 8 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng
July 21, 2005

Lun-Yi Lao
Primary Examiner